A.J

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,036	01/22/2002	Gradus Janssen	YOR920010266US2 (590.071)	1397

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EXAMINER
GARBOWSKI, LEIGH M

ART UNIT	PAPER NUMBER
2825	

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	10/054,036	JANSSEN, GRADUS
Office Action Summary	Examiner	Art Unit
	Leigh Marie Garbowski	2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 October 2004</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-15</u> is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-15</u> is/are rejected.

7)☒ Claim(s) <u>1-6</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>11 March 2002</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☐ All   b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
  Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

Specification

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "package", "method", and "program storage device" complete with their associate features must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 1-6 are objected to because of the following informalities: the language "adapted to" is not a positive limitation and should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

Claims 1, 8 and 15 provides for the use of "whereby the use of pointers is precluded", but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 6 and 13 provides for the use of "avoid[ing] the use of reference counts", but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

Claims 1, 6, 8, 13, 15 rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public
> use or on sale in this country, more than one year prior to the date of application for patent in the United
> States.

Claims 1-3, 6-10 and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Biere ["The ABCD package"].

As per claim 1, Biere discloses a BDD package comprising: an arrangement for identifying at least two nodes in a graph [paragraph 1]; said identifying arrangement being adapted to assign integer numbers to different nodes, whereby the use of pointers is precluded and an order among the nodes is maintained [paragraphs 3-4]. As per claim 2, Biere further discloses wherein said identifying arrangement is adapted to assign consecutive integer numbers to different nodes [paragraph 3]. As per claim 3, Biere further discloses wherein said identifying arrangements is adapted to assign to a given node an integer number which coincides with an index in a memory array in which the node resides [paragraphs 1 and 9]. As per claim 6, Biere further discloses wherein said identifying arrangement is adapted to avoid the use of reference counts [paragraph 2]. As per claim 7, Biere further discloses wherein the graph is a DAG [by definition, the examiner takes Official Notice that a BDD is a DAG representation of a function].

As per claims 8-10 and 13-15, Biere discloses the features of the method and program storage device as well as the BDD package outlined above.

Claims 1-5, 8-12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Biliris ["An Efficient Database Storage Structure for Large Dynamic Objects"].

As per claim 1, Biliris discloses a package comprising: an arrangement for identifying at least two nodes in a graph [page 302, section 3, first paragraph]; said identifying arrangement being adapted to assign integer numbers to different nodes, whereby the use of pointers is precluded and an order among the nodes is maintained [pages 303-304, sections 3.1 and 3.2, figures 3 and 4]. As per claim 2, Biliris further discloses wherein said identifying arrangement is adapted to assign consecutive integer numbers to different nodes [figures 3 and 4]. As per claim 3, Biliris further discloses wherein said identifying arrangement is adapted to assign to a given node an integer number which coincides with an index in a memory array in which the node resides [page 302, section 3, paragraph 1, figure 1]. As per claim 4, Biliris further discloses wherein said identifying arrangement is adapted to access an indexed node via a paging access scheme [pages 302-303, section 3, paragraphs 1-2; page 304, section 3.3]. As per claim 5, Biliris further discloses wherein said identifying arrangement is

adapted to access an indexed node via a two-step paging access scheme [pages 302-303, section 3, paragraphs 1-2; page 304, section 3.3].

As per claims 8-12 and 15, Biliris discloses the features of the method and program storage device as well as the package outlined above.

Response to Arguments

Applicant's arguments filed 10/26/2004 have been fully considered but they are not persuasive.

Applicant's reference to other patent numbers is not persuasive because it is the present application that is being examined.

The disclosure is objected to because it still contains an embedded hyperlink and/or other form of browser-executable code. This requirement does not apply to the electronic documents listed on the 892 and 1449 PTO forms.

The drawings are objected to because they do not show the features identified above. There is no package, method, or program storage device, complete with associated features claimed, depicted in the drawings. The current drawings merely illustrate a memory layout and graphs.

Claims 1-6 are objected to because "adapted to" does not clarify what the identifying arrangement is, rather it merely alludes to an ability to do so. It is required that the claims be given a proper interpretation, and such language inhibits the examination for equivalents thereof.

Regarding claims 1, 8, and 15, "precluded" is not an active step, the whereby feature introduces use. The feature of "pointers" in not recited elsewhere in the claims, thus it is not clear that they are precluded, save for the use language which is inappropriate as rejected above. The reasoning for claims 6 and 13 are similar in terms of "reference counts" and are omitted for sake of brevity.

Regarding the rejection of claims under 35 U.S. C. 101, please see MPEP 2173.05(q).

Regarding the Biere reference, a stack is disclosed, which is an organized arrangement, thus, it is considered that an order among the nodes would be maintained by definition.

Regarding the Biliris reference, a sequence is disclose, which is an order of succession, thus, it is considered that an order among the nodes would be maintained by definition.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh Marie Garbowski whose telephone number is 571-272-1893. The examiner can normally be reached on days.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on 571-272-1907. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LEIGH M. GARBOWSKI
PRIMARY EXAMINER